

14. (Amended Thrice) A method of viewing phenotypic and genotypic data related to a non-human animal comprising the steps of:

viewing, using a computer, both phenotypic data and genotypic data for a non-human animal;

receiving in a database of a central database processing resource related to the computer, data relating to the phenotype data of the animal and receiving in the database of the central data processing resource, genotypic data relating to the breed of the animal and genetic background of the animal;

analyzing, using a computer, the phenotypic data and the genotypic data based on predetermined characteristics; and

reporting the analysis of the phenotypic data and genotypic data.

26. (Amended Thrice) Apparatus comprising

a screen for monitoring, using a computer, both phenotypic data and genotypic data for a non-human animal,

a computer for analyzing the phenotypic data and the genotypic data based on predetermined characteristics;

a means for receiving in a database of a central database processing resource, phenotypic data relating to a health assessment of the animal and receiving in the database of the central database processing resource, genotypic data relating to the breed of the animal and the genetic background of the animal; and

a communications network for reporting the analysis of the phenotypic data and genotypic data.

29. (Amended Thrice) A computer-readable medium having stored thereon instructions for a computer to access the medium comprising:

instructions to access data on the medium,

a first database on the medium related to genotypic data of a non-human animal,

a second database on the medium related to phenotypic data of the animal; and

the computer-readable medium including instructions to analyze the first and second database, wherein the instructions are selected from the group consisting of predicting health, predicting disease probabilities, predicting disorder probabilities and longevity of the animal.